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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/194,991 07/09/99 WEILER R AP8985

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MMC2/0524

EXAMINER

WAKS, J

ART UNIT	PAPER NUMBER
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2834

DATE MAILED: 05/24/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.
09/194,991

Applicant(s)
Weiler et al.

Examiner
Joseph Waks

Group Art Unit
2834



☒ Responsive to communication(s) filed on Jul 9, 1999

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) 1-37 is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 1-37 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☒ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☒ The drawing(s) filed on Jul 9, 1999 is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☒ The specification is objected to by the Examiner.

☒ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☒ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been

☐ received.

☐ received in Application No. (Series Code/Serial Number) _____

☒ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of References Cited, PTO-892

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 5

☐ Interview Summary, PTO-413

☒ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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DETAILED ACTION

Priority

1. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No. PCT/EP 98/01798, filed on March 26, 1998.

Oath/Declaration

2. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:

It does not identify the post office address of each inventor. A post office address is an address at which an inventor customarily receives his or her mail and may be either a home or business address. The post office address should include the ZIP Code designation.

Drawings

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the armature being actuated by a magnetic leakage flux generated by the stator as recited in claim 7, the steel cable pressed into a

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conical bore as recited in claim 26, the expending lock provided with a drawbar or a nipple as recited in claim 27, the O-ring as recited in claim 28 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Please provide a diagram showing the electromagnetic relations between the stator and the armature in energized and de-energized positions.

Specification

4. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 250 words. It is important that the abstract not exceed 250 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

In lines 1, and 6, "invention" is a phrase which can be implied.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

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6. **Claim 7** is rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

In claim 7, the feature of the armature being actuated by a magnetic leakage flux generated by the stator is not described in specification or shown in the drawings in a way that one of ordinary skills in the art would understand how to make or use the invention.

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. The claims are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors.

Please renumber the claims from 38-74 to 1-37 since these are the claims that were ever provided in this application (Re Rule 1.26). Also, amend the dependent claims accordingly.

9. **Claims 1-37** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, line 7, "hollow" should be --a hollow--, lines 7-8, "a reduction gear" should be --said reduction gear--.

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In claim 2, line 3, "the spindle" lacks antecedent basis, line 4, "power-transmitting fashion" should be --a power-transmitting fashion--.

In claim 3, lines 2-3, "self-locking fashion" should be --a self-locking fashion--.

In claim 4, lines 2-3, "self-locking fashion" should be --a self-locking fashion--.

In claim 7, lines 3-4, "the magnetic flux" lacks antecedent basis.

In claim 9, and "the spindle" lacks antecedent basis.

In claim 10, line 3, "the form" lacks antecedent basis.

In claim 11, line 2, "the housing" and line 3, "the end of the spindle" lack antecedent basis.

In claim 12, line 3, "the correspondingly shaped end of the spindle" lacks antecedent basis.

In claim 13, line 2, "the form" lacks antecedent basis.

In claim 14, line 2, "the spindle nut" lacks antecedent basis.

In claim 15, line 2, "the form" lacks antecedent basis.

In claim 16, line 3, "the surface" lacks antecedent basis.

In claim 17, lines 2-3, "the housing", and line 3, "the rotor end" lack antecedent basis.

In claim 18, line 3 "the housing" and "said housing" lack antecedent basis, and line 4, "an end" should be --said end--.

In claim 19, line 3, "the other end" lacks antecedent basis.

In claim 22, line 3, "a preferable" renders the claim indefinite because it is unclear whether the limitation(s) following the phrase are part of the claimed invention or not, and the resulting claim does not clearly set forth the metes and bounds of the patent protection desired.

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In claim 27, line 2, "the end" lacks antecedent basis, also, terminate the claim with a period mark.

In claim 28, line 4, "a preferably" is indefinite, line 4, "the shape" and line 5, "the housing" lack antecedent basis.

In claim 29, line 2, "the end", line 3, "the plastic sheathing", line 4, "the steel strand" lack antecedent basis, and line 4, "a preferably" is indefinite.

In claim 34, line 2, "the planet wheels, and line 3, "the inner side" and "the housing" lack antecedent basis.

In claim 35, line 2, "the planet wheels", and line 4, "the housing" and "the region" lack antecedent basis.

In claim 36, line 2, "the housing" and line 3, "the edges" lack antecedent basis.

Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

11. **Claims 1-9, 30, 31** are rejected under 35 U.S.C. 102(b) as being anticipated by

Korthhaus et al. (GB 1,027,600).

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Korthhaus et al. disclose in Figure invention as claimed: an actuating unit connected to a power transmission element or a spindle 12, 13 and consisting of an electric motor of any known type of motors (Re page 2, lines 56-61) and a reduction gear in a form of the spindle drive 8, 11 arranged between the motor and the power transmission element, wherein a rotor 4 of the motor is shaped in a hollow fashion and radially encompasses the reduction gear, a spindle nut connected to the rotor in a power transmission fashion, the spindle drive being realized in a self-locking fashion (Re page 2, lines 127-130 and page 3 lines 1-14), the spindle drive being not realized in a self-locking fashion and cooperates with a locking mechanism by means of a ball screw 11, the locking mechanism being an electromagnetic braking device formed by an armature of a magnetic clamp 18 engaged with a friction surface of the rotor and cooperating with the rotor by means of spring 27, the spindle being secured from rotating (Re page 2, lines 84-88), and the housing 1.

Note: the recitation that the electromechanical component is for actuating a vehicle parking brake of the type including a drum brake with two brake shoes and an expending lock has not been given patentable weight because it has been held that a preamble is denied the effect of a limitation where the claim is drawn to a structure and the portion of the claim following the preamble is a self-contained description of the structure not depending for completeness upon the introductory clause. *Kropa v. Robie*, 88 USPQ 478 (CCPA 1951).

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Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. **Claim 10** is rejected under 35 U.S.C. 103(a) as being unpatentable over **Korthhaus et al.** (GB 1,027,600) in view of **Prokop** (US 4,386,684).

Korthhaus et al. disclose the electromechanical component essentially as claimed.

However, **Korthhaus et al.** fail to disclose the housing in a form of deep drawn sheet metal part.

Prokop discloses in column 1, lines 20-25 and 44-46 a housing 35 for electromechanical component actuating vehicle brakes made of stamped metal sheet for the purpose of reducing the cost of manufacturing of the housing (Re column 1, lines 31-33).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to design the electromechanical component as taught by **Korthhaus et al.** and to provide the housing in a form of deep drawn sheet metal part as taught by **Prokop** for the purpose of reducing the cost of manufacturing of the housing.

14. **Claims 23, 24 and 37** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Korthhaus et al.** (GB 1,027,600) in view of **Newstead** (US 3,762,510) and **Kazunishi** (US 4,541,303).

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Korthhaus et al. disclose the electromechanical component essentially as claimed. However, **Korthhaus et al.** fail to disclose the steel cable line arranged between the power transmission element and the expanding lock activating two brake shoes of a drum brake.

Newstead discloses a sheathed cable line 11 arranged between the power transmission element and the expanding lock 15 for the purpose of activating two brake shoes of a drum brake.

Kazunishi discloses a flexible coaxial pushpull cable comprising a sheathed cable line 2 comprising a steel strand core 6 and the plastic sheathing 3 surrounding the steel strand 6 for the purpose of providing a flexible pushpull cable capable of reducing a power transmission error resulting from bending deformation of the core cable in the region of the connection joint.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to design the electromechanical component as taught by **Korthhaus et al.** and to provide the sheathed cable line arranged between the power transmission element and the expanding lock as taught by **Newstead** for the purpose of activating two brake shoes of a drum brake. It would have been further obvious to one having ordinary skill in the art at the time the invention was made to design the combined electromechanical component and to provide the sheathed cable line comprising a steel strand core and the plastic sheathing surrounding the steel strand arranged as taught by **Kazunishi** for the purpose of providing a flexible pushpull cable capable of reducing a power transmission error resulting from bending deformation of the core cable in the region of the connection joint.

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15. **Claims 25-27** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Korthhaus et al. (GB 1,027,600)** in view of **Newstead (US 3,762,510)** and **Kazunishi (US 4,541,303)** as applied to claim 23 above and further in view of **Gutierrez et al. (DE 197 34 864 A1)**

The combined electromechanical component discloses all elements essentially as claimed. However, it fails to disclose the cable line being pressed into the conical power transmission element.

Gutierrez et al. disclose in Figures 1a-2c the cable line 9 being pressed into the conical bore 5 in the power transmission element with a nipple 2 for the purpose of providing a simple , especially blind fitting of the brake cable.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to design the combined electromechanical component and to provide the cable line being pressed into the conical bore in the power transmission element with a nipple as taught by **Gutierrez et al.** for the purpose of providing a simple , especially blind fitting of the brake cable.

Allowable Subject Matter

16. **Claims 11-22, 28, 29, 32-36** would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Re claims 11 and 12, the feature of the housing containing an axial tubular extension protruding into interior of the rotor and accommodating an end of the spindle facing the

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expanding lock and securing the spindle from rotation, in combination with the other limitations present, are neither disclosed or taught by the prior art of record.

Re claims 13-16, the feature of the rotor being a tubular deep-drawn sheet metal part, in combination with the other limitations present, are neither disclosed or taught by the prior art of record.

Re claim 17, the feature of the fixed bearing being held in the housing by rolling up a rotor end wherein the bearing supports the , in combination with the other limitations present, are neither disclosed or taught by the prior art of record.

Re claims 18-22, the feature of the bearing cover being fixed by rolling up the housing and enclosing an end of the housing, in combination with the other limitations present, are neither disclosed or taught by the prior art of record.

Re claim 28 and 29, the feature of the bellows in the shape of an O-ring accommodated in the circular depression in the housing, in combination with the other limitations present, are neither disclosed or taught by the prior art of record.

Re claim 32-35, the feature of the reduction gear radially encompassed by the hollow rotor and a planetary gear arranged between the rotor and the planetary gear, in combination with the other limitations present, are neither disclosed or taught by the prior art of record.

Re claim 36, the feature of the housing provided with a constriction for mounting the actuating unit by rolling up edges of a cutout in a dirt trap, in combination with the other limitations present, are neither disclosed or taught by the prior art of record.

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Prior Art

17. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.


Communication

18.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph Waks whose telephone number is (703)308-1676 . The examiner can normally be reached on Mondays thru Fridays from 8:00am to 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez, can be reached on (703) 308-1371. The fax phone number for the organization where this application or proceeding is assigned is (703) 308-5841.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.


JOSEPH WAKS
PATENT EXAMINER
TC-2800

JW
May 22, 2000